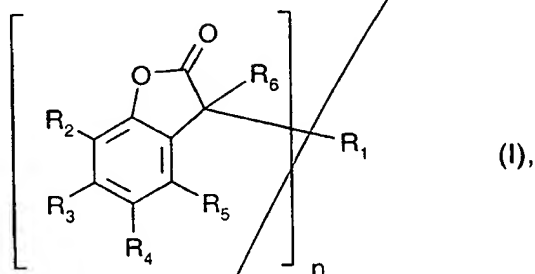


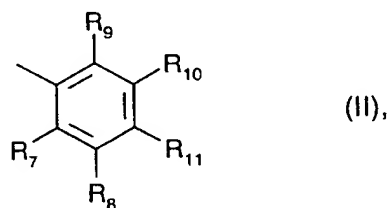
Claims:

1. Process for preventing migration of the oxidised developer in a colour photographic material from one colour sensitive layer to another by incorporating a compound of the formula I into said material



wherein, if $n = 1$,

R_1 is a cyclic residue selected from naphthyl, phenanthryl, anthryl, 5,6,7,8-tetrahydro-2-naphthyl, 5,6,7,8-tetrahydro-1-naphthyl, thienyl, benzo[b]thienyl, naphtho[2,3-b]thienyl, thianthrenyl, dibenzofuryl, chromenyl, xanthenyl, phenoxathiinyl, pyrrolyl, imidazolyl, pyrazolyl, pyrazinyl, pyrimidinyl, pyridazinyl, indoliziny, isoindolyl, indolyl, indazolyl, purinyl, quinoliziny, isoquinolyl, quinolyl, phthalazinyl, naphthyridinyl, quinoxaliny, quinazoliny, cinnoliny, pteridinyl, carbazolyl, β -carboliny, phenanthridinyl, acridinyl, perimidinyl, phenanthroliny, phenazinyl, isothiazolyl, phenothiazinyl, isoxazolyl, furazany, biphenyl, terphenyl, fluorenyl or phenoxazinyl, each of which is unsubstituted or substituted by C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, hydroxy, halogen, amino, C_1 - C_4 alkylamino, phenylamino or di(C_1 - C_4 -alkyl)amino; or R_1 is a radical of formula II



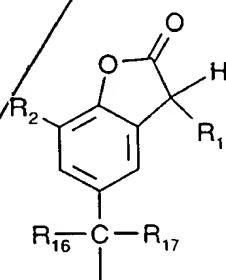
and, if $n = 2$,

R_1 is unsubstituted or C_1 - C_4 alkyl- or hydroxy-substituted phenylene or naphthylene; or $-R_{12}-X-R_{13}-$;

R_2 , R_3 , R_4 and R_5 are each independently of one another hydrogen; chloro; hydroxy; C_1 - C_{25} -alkyl; C_7 - C_9 phenylalkyl; unsubstituted or C_1 - C_4 alkyl-substituted phenyl; unsubstituted or C_1 - C_4 alkyl-substituted C_5 - C_8 cycloalkyl; C_1 - C_{18} alkoxy; C_1 - C_{18} alkylthio; C_1 - C_4 alkylamino; di(C_1 - C_4 -alkyl)amino; C_1 - C_{25} alkanoyloxy; C_1 - C_{25} alkanoylamino; C_3 - C_{25} alkenoyloxy;

C_3 - C_{25} alkanoyloxy which is interrupted by oxygen, sulphur or >N-R_{14} ; C_6 - C_9 cycloalkyl-carbonyloxy; benzoyloxy or C_1 - C_{12} alkyl-substituted benzoyloxy; or R_2 and R_3 , or R_3 and R_4 , or R_4 and R_5 , together with the linking carbon atoms, form a benzene ring; or R_4 is $-C_mH_{2m}-COR_{15}$, $-O-(C_vH_{2v})-COR'_{15}$, $-O-(CH_2)_q-OR_{32}$, $-OCH_2-CH(OH)-CH_2-R'_{15}$, $-OCH_2-CH(OH)-CH_2-OR_{32}$, or $-(CH_2)_qOH$;

or, if R_3 , R_5 and R_6 are hydrogen, R_4 is additionally a radical of formula III



(III),

wherein R_1 is as defined above for $n = 1$;

R_6 is hydrogen or, when R_4 is hydroxy, R_6 can also be C_1 - C_{25} alkyl or C_3 - C_{25} alkenyl;

R_7 , R_8 , R_9 , R_{10} and R_{11} are each independently of one another hydrogen; halogen; hydroxy;

C_1 - C_{25} alkyl; C_2 - C_{25} alkyl which is interrupted by oxygen, sulphur or >N-R_{14} ; C_1 -

C_{25} alkoxy; C_2 - C_{25} alkoxy which is interrupted by oxygen, sulphur or >N-R_{14} ;

C_1 - C_{25} alkylthio; C_3 - C_{25} -alkenyl; C_3 - C_{25} alkenoyloxy; C_3 - C_{25} alkynyl; C_3 - C_{25} alkynyloxy; C_7 - C_9 phenylalkyl; C_7 - C_9 phenylalkoxy; unsubstituted or C_1 - C_4 alkyl-substituted phenyl; unsubstituted or C_1 - C_4 alkyl-substituted phenoxy; unsubstituted or C_1 - C_4 alkyl-substituted C_5 - C_8 cycloalkyl; unsubstituted or C_1 - C_4 alkyl-substituted C_5 - C_8 cycloalkoxy; C_1 - C_4 alkylamino; di(C_1 - C_4 alkyl)amino; C_1 - C_{25} alkanoyl; C_3 - C_{25} alkanoyl which is interrupted by oxygen, sulphur

or $\text{N}-\text{R}_{14}$; $\text{C}_1\text{-C}_{25}$ alkanoyloxy; $\text{C}_3\text{-C}_{25}$ alkanoyloxy which is interrupted by oxygen,

sulphur or $\text{N}-\text{R}_{14}$; $\text{C}_1\text{-C}_{25}$ alkanoylamino; $\text{C}_3\text{-C}_{25}$ alkenoyl; $\text{C}_3\text{-C}_{25}$ alkenoyl which is

interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$; $\text{C}_3\text{-C}_{25}$ alkenoyloxy; $\text{C}_3\text{-C}_{25}$ alkenoyloxy which

is interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$; $\text{C}_6\text{-C}_9$ cycloalkylcarbonyl; $\text{C}_6\text{-C}_9$ cycloalkylcarbonyloxy; benzoyl or $\text{C}_1\text{-C}_{12}$ alkyl-substituted benzoyl; benzoyloxy or $\text{C}_1\text{-C}_{12}$ alkyl-substituted benzoyloxy;

C_{12} alkyl-substituted benzoyloxy; $\text{—O—C(R}_{18}\text{)(R}_{19}\text{)—C(=O)—R}_{15}$ or $\text{—O—C(R}_{20}\text{)(H)—C(R}_{21}\text{)(R}_{22}\text{)—O—R}_{23}$ or, in

formula II, R_7 and R_8 , or R_8 and R_{11} , together with the linking carbon atoms, form a benzene ring;

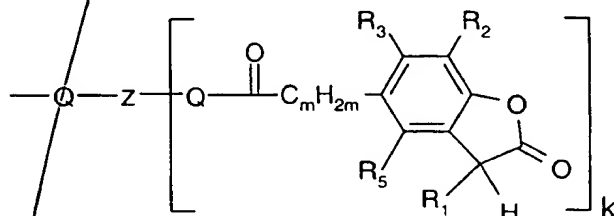
R_{12} and R_{13} are each independently of the other unsubstituted or $\text{C}_1\text{-C}_4$ alkyl-substituted phenylene or naphthylene;

R_{14} is hydrogen or $\text{C}_1\text{-C}_8$ alkyl;

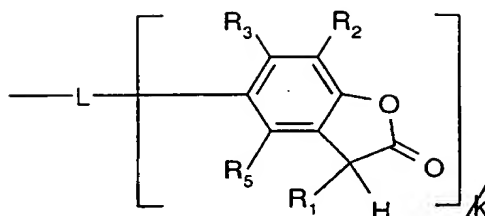
R_{15} and R'_{15} independently are hydroxy; $\left[\text{—O}^- \frac{1}{r} \text{M}^{r+}\right]$; $\text{C}_1\text{-C}_{20}$ alkoxy; $\text{C}_3\text{-C}_{20}$ alkoxy

interrupted by O and/or substituted by a radical selected from OH, phenoxy, $\text{C}_7\text{-C}_{15}$ alkylphenoxy, $\text{C}_7\text{-C}_{15}$ alkoxyphenoxy; or are $\text{C}_5\text{-C}_{12}$ cycloalkoxy; $\text{C}_7\text{-C}_{17}$ phenylalkoxy;

phenoxy; $\text{—N(R}_{24}\text{)(R}_{25}\text{)}$; or a group of the formula IIIa or IIIb



(IIIa);



(IIIb);

R₁₆ and R₁₇ are each independently of the other hydrogen, CF₃, C₁-C₁₂alkyl or phenyl, or R₁₆ and R₁₇, together with the linking carbon atom, are a C₅-C₈cycloalkylidene ring which is unsubstituted or substituted by 1 to 3 C₁-C₄alkyl;

R₁₈ and R₁₉ are each independently of the other hydrogen, C₁-C₄alkyl or phenyl;

R₂₀ is hydrogen or C₁-C₄alkyl;

R₂₁ is hydrogen; unsubstituted or C₁-C₄alkyl-substituted phenyl; C₁-C₂₅alkyl; C₂-C₂₅alkyl

which is interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$; C₇-C₉phenylalkyl which is unsubsti-

tuted or substituted at the phenyl moiety by 1 to 3 C₁-C₄alkyl; C₇-C₂₅phenylalkyl which is

interrupted by oxygen, sulphur or $\text{N}-\text{R}_{14}$ and which is unsubstituted or substituted at

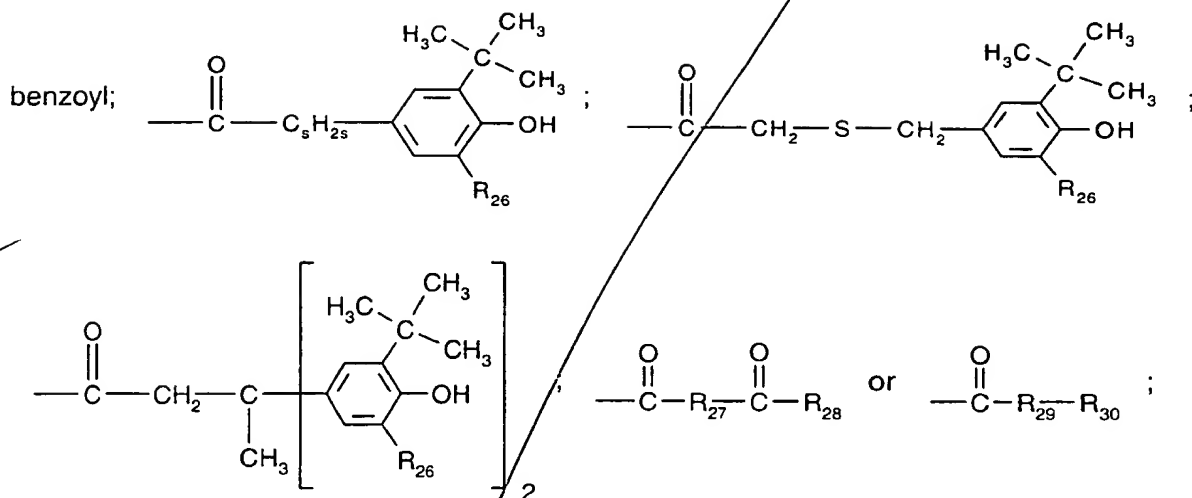
the phenyl moiety by 1 to 3 C₁-C₄alkyl; or R₂₀ and R₂₁, together with the linking carbon atoms, form a C₅-C₁₂cycloalkylene ring which is unsubstituted or substituted by 1 to 3 C₁-C₄alkyl;

R₂₂ is hydrogen or C₁-C₄alkyl;

R₂₃ is hydrogen; C₁-C₂₅alkanoyl; C₃-C₂₅alkenoyl; C₃-C₂₅alkanoyl which is interrupted by

oxygen, sulphur or $\text{N}-\text{R}_{14}$; C₂-C₂₅alkanoyl which is substituted by a di(C₁-C₆alkyl)phos-

phonate group; C₆-C₉cycloalkylcarbonyl; thenoyl; furoyl; benzoyl or C₁-C₁₂alkyl-substituted

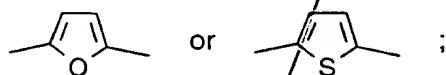


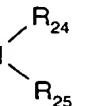
R_{24} and R_{25} are each independently of the other hydrogen or C_1 - C_{18} alkyl;

R_{26} is hydrogen or C_1 - C_8 alkyl;

R_{27} is a direct bond; C_1 - C_{18} alkylene; C_2 - C_{18} alkylene which is interrupted by oxygen, sulphur

or ---N---R_{14} ; C_2 - C_{18} alkenylene; C_2 - C_{20} alkylidene; C_7 - C_{20} phenylalkylidene; C_5 - C_8 cycloalkylene; C_7 - C_8 bicycloalkylene; unsubstituted or C_1 - C_4 alkyl-substituted phenylene;



R_{28} is hydroxy, $\text{---O}^-\frac{1}{r}\text{M}^{r+}$, C_1 - C_{18} alkoxy or ---N---  ;

R_{29} is oxygen or -NH-;

R_{30} is C_1 - C_{18} alkyl or phenyl;

R_{31} is hydrogen or C_1 - C_{18} alkyl;

R_{32} is C_1 - C_{18} alkanoyl; C_1 - C_8 alkanoyl substituted by phenyl or C_7 - C_{15} alkylphenyl; C_3 - C_{18} alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a linking group of valency (k+1) and is as a divalent group

-O-;

Q- C_2 - C_{12} alkylene-Q;

-O-CH₂-CH(OH)-CH₂-O-;

-Q- C_2 - C_{12} alkylene-Q-CO-C_vH_{2v}-O-;

-O-C₂-C₁₂alkylene-O-CH₂-CH(OH)-CH₂-O-;

Q-interrupted Q-C₄-C₁₂alkylene-Q;

Q-phenylene-Q or

Q-phenylene-D-phenylene-Q with D being C₁-C₄alkylene, O, S, SO or SO₂;

L as a trivalent group is Q-capped C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, or a group (-O-CH₂)₃C-CH₂OH; -Q-C_aH_{2a}-N(C_bH_{2b}-Q)-C_cH_{2c}-Q-;

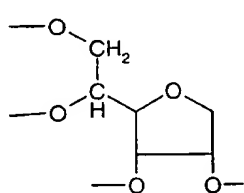
-Q-C₃-C₁₂alkanetriyl(-Q-CO-C_vH_{2v}-O-)₂;

-O-C₃-C₁₂alkanetriyl(-O-CH₂-CH(OH)-CH₂-O-)₂; and

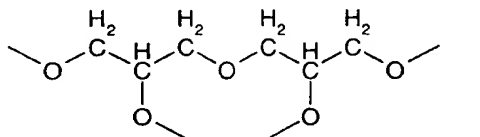
L as a tetravalent group is a tetravalent residue of a hexose or a hexitol;

-Q-C₄-C₁₂alkanetetryl(-Q-CO-C_vH_{2v}-O-)₃;

-O-C₄-C₁₂alkanetetryl(-O-CH₂-CH(OH)-CH₂-O-)₃; Q-capped C₄-C₁₂alkanetetryl; a group



or a group



M is an r-valent metal cation;

Q is oxygen or -NH-;

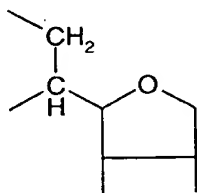
X is a direct bond, oxygen, sulphur or -NR₃₁-;

Z is a linking group of valency (k+1) and is as a divalent group C₂-C₁₂alkylene; Q-interrupted C₄-C₁₂alkylene; phenylene or phenylene-D-phenylene with D being C₁-C₄alkylene, O, S, SO or SO₂;

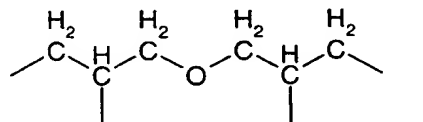
Z as a trivalent group is C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, a group (-CH₂)₃C-CH₂OH, or a group -C_aH_{2a}-N(C_bH_{2b}-)-C_cH_{2c}-; and

Z as a tetravalent group is a tetravalent, carbon-ended residue of a hexose or a hexitol, C₄-

C₁₂alkanetetryl, a group



or a group



a, b, c and k independently are 1, 2 or 3;

m is 0 or a number from the range 1-12, preferably 1-6;

n is 1 or 2;

q is 1, 2, 3, 4, 5 or 6;

r is 1, 2 or 3; and

s is 0, 1 or 2;

v is 1, 2, 3, 4, 5, 6, 7 or 8, preferably 1 or 2;

provided that, when R₇ is hydroxy, alkanoyloxy or alkanoyloxy interrupted by O, S or N(R₁₄) and R₉ is hydrogen, R₁₀ is not identical with R₄; and when R₉ is hydroxy, alkanoyloxy or alkanoyloxy interrupted by O, S or N(R₁₄) and R₇ is hydrogen, R₈ is not identical with R₄.

2. Process according to claim 1, wherein in the compound of formula I

R₇ and R₉ are each independently of one another hydrogen; halogen; C₁-C₂₅alkyl; C₂-C₂₅alkyl

which is interrupted by oxygen, sulphur or >N-R_{14} ; C₂-C₂₅alkoxy which is interrupted by

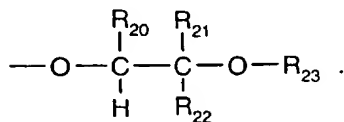
oxygen, sulphur or >N-R_{14} ; C₁-C₂₅alkylthio; C₃-C₂₅-alkenyl; C₃-C₂₅alkenyloxy; C₃-

C₂₅alkynyl; C₃-C₂₅alkynyloxy; C₇-C₉phenylalkyl; C₇-C₉phenylalkoxy; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted phenoxy; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkoxy; C₁-C₄alkylamino; di(C₁-C₄alkyl)amino; C₁-C₂₅alkanoyl; C₃-C₂₅alkanoyl which is

interrupted by oxygen, sulphur or >N-R_{14} ; C₁-C₂₅alkanoylamino; C₃-C₂₅alkenoyl; C₃-

C₂₅alkenoyl which is interrupted by oxygen, sulphur or >N-R_{14} ; C₆-C₉-

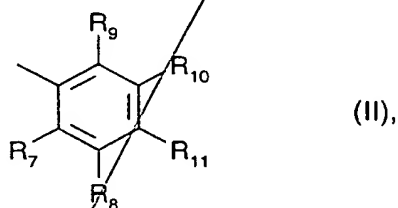
cycloalkylcarbonyl; benzoyl or C₁-C₁₂alkyl-substituted benzoyl; $\text{—O—}\overset{\text{R}_{18}}{\underset{\text{R}_{19}}{\text{C}}}\text{—}\overset{\text{O}}{\parallel}\text{C—R}_{15}$ or



3. Process according to claim 1 wherein in the compound of formula I

R₁ is naphthyl, phenanthryl, anthryl, 5,6,7,8-tetrahydro-2-naphthyl, 5,6,7,8-tetrahydro-1-naphthyl, thienyl, benzo[b]thienyl, naphtho[2,3-b]thienyl, thianthrenyl, dibenzofuryl, chromenyl, xanthenyl, phenoxathiinyl, pyrrolyl, imidazolyl, pyrazolyl, pyrazinyl, pyrimidinyl, pyridazi-

nyl, indoliziny, isoindolyl, indolyl, indazolyl, purinyl, quinoliziny, isoquinolyl, quinolyl, phthalaziny, naphthyridinyl, quinoxaliny, quinazoliny, cinnoliny, pteridinyl, carbazolyl, β -carboliny, phenanthridinyl, acridinyl, perimidinyl, phenanthrolinyl, phenazinyl, isothiazolyl, phenothiaziny, isoxazolyl, furazanyl, biphenyl, terphenyl, fluorenyl or phenoxazinyl, each of which is unsubstituted or substituted by C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, hydroxy, halogen, amino, C_1 - C_4 alkylamino, phenylamino or di(C_1 - C_4 alkyl)amino, or R_1 is a radical of formula II

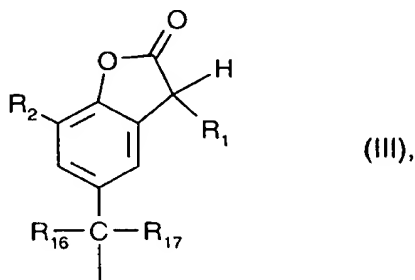


and, if $n = 2$,

R_1 is unsubstituted or C_1 - C_4 alkyl- or hydroxy-substituted phenylene or naphthylene; or $-R_{12}-X-R_{13}-$,

R_2 , R_3 , R_4 and R_5 are each independently of one another hydrogen, chloro, hydroxy, C_1 - C_{25} alkyl, C_7 - C_9 phenylalkyl, unsubstituted or C_1 - C_4 alkyl-substituted phenyl; unsubstituted or C_1 - C_4 alkyl-substituted C_5 - C_8 cycloalkyl; C_1 - C_{18} alkoxy, C_1 - C_{18} alkylthio, C_1 - C_4 alkylamino, di(C_1 - C_4 alkyl)amino, C_1 - C_{25} alkanoyloxy, C_1 - C_{25} alkanoylamino, C_3 - C_{25} alkenoyloxy;

C_3 - C_{25} alkanoyloxy which is interrupted by oxygen, sulphur or $\text{N}-R_{14}$; C_6 - C_9 cycloalkyl-carbonyloxy, benzoyloxy or C_1 - C_{12} alkyl-substituted benzoyloxy; or R_2 and R_3 , or R_3 and R_4 , or R_4 and R_5 , together with the linking carbon atoms, form a benzene ring; or R_4 is $-C_mH_{2m}-COR_{15}$ or $-(CH_2)_qOH$ or, if R_3 , R_5 and R_6 are hydrogen, R_4 is additionally a radical of formula III



wherein R_1 is as defined above for $n = 1$;

R_6 is hydrogen or, when R_4 is hydroxy, R_6 can also be C_1 - C_{25} alkyl or C_3 - C_{25} alkenyl;

R_7 , R_8 , R_9 , R_{10} and R_{11} are each independently of one another hydrogen, halogen, hydroxy,

C_1 - C_{25} alkyl; C_2 - C_{25} alkyl which is interrupted by oxygen, sulphur or >N-R_{14} ; C_1 -

C_{25} alkoxy; C_2 - C_{25} alkoxy which is interrupted by oxygen, sulphur or >N-R_{14} ;

C_1 - C_{25} alkylthio, C_3 - C_{25} -alkenyl, C_3 - C_{25} alkenyloxy, C_3 - C_{25} alkynyl, C_3 - C_{25} alkynyloxy, C_7 - C_9 phenylalkyl, C_7 - C_9 phenylalkoxy, unsubstituted or C_1 - C_4 alkyl-substituted phenyl; unsubstituted or C_1 - C_4 alkyl-substituted phenoxy; unsubstituted or C_1 - C_4 alkyl-substituted C_5 - C_8 cycloalkyl; unsubstituted or C_1 - C_4 alkyl-substituted C_5 - C_8 cycloalkoxy; C_1 - C_4 alkylamino, di(C_1 - C_4 alkyl)amino, C_1 - C_{25} alkanoyl; C_3 - C_{25} alkanoyl which is interrupted by oxygen, sulphur

or >N-R_{14} ; C_1 - C_{25} alkanoyloxy; C_3 - C_{25} alkanoyloxy which is interrupted by oxygen,

sulphur or >N-R_{14} ; C_1 - C_{25} alkanoylamino, C_3 - C_{25} alkenoyl; C_3 - C_{25} alkenoyl which is

interrupted by oxygen, sulphur or >N-R_{14} ; C_3 - C_{25} alkenoyloxy; C_3 - C_{25} alkenoyloxy which

is interrupted by oxygen, sulphur or >N-R_{14} ; C_6 - C_9 cycloalkylcarbonyl, C_6 -

C_9 cycloalkylcarbonyloxy, benzoyl or C_1 - C_{12} alkyl-substituted benzoyl; benzoyloxy or C_1 -

C_{12} alkyl-substituted benzoyloxy; $\text{—O—}\overset{\overset{R_{18}}{|}}{\underset{\underset{R_{19}}{|}}{C}}\text{—}\overset{\overset{O}{||}}{C}\text{—}R_{15}$ or $\text{—O—}\overset{\overset{R_{20}}{|}}{\underset{\underset{H}{|}}{C}}\text{—}\overset{\overset{R_{21}}{|}}{\underset{\underset{R_{22}}{|}}{C}}\text{—O—}R_{23}$ or, in

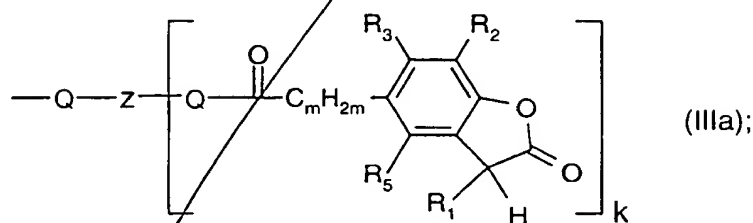
formula II, R_7 and R_8 , or R_8 and R_{11} , together with the linking carbon atoms, form a benzene ring,

R_{12} and R_{13} are each independently of the other unsubstituted or C_1 - C_4 alkyl-substituted phenylene or naphthylene,

R_{14} is hydrogen or C_1 - C_8 alkyl,

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R_{15} is hydroxy, $\left[-O^- \frac{1}{r} M^{r+} \right]$, C_1 - C_{20} alkoxy, $-N \begin{smallmatrix} R_{24} \\ R_{25} \end{smallmatrix}$, or a group of the formula IIIa



R_{16} and R_{17} are each independently of the other hydrogen, CF_3 , C_1 - C_{12} alkyl or phenyl, or R_{16} and R_{17} , together with the linking carbon atom, are a C_5 - C_8 cycloalkylidene ring which is unsubstituted or substituted by 1 to 3 C_1 - C_4 alkyl;

R_{18} and R_{19} are each independently of the other hydrogen, C_1 - C_4 alkyl or phenyl,

R_{20} is hydrogen or C_1 - C_4 alkyl,

R_{21} is hydrogen, unsubstituted or C_1 - C_4 alkyl-substituted phenyl; C_1 - C_{25} alkyl; C_2 - C_{25} alkyl

which is interrupted by oxygen, sulphur or $\text{>N}-R_{14}$; C_7 - C_9 phenylalkyl which is unsubstituted or substituted at the phenyl moiety by 1 to 3 C_1 - C_4 alkyl; C_7 - C_{25} phenylalkyl which is

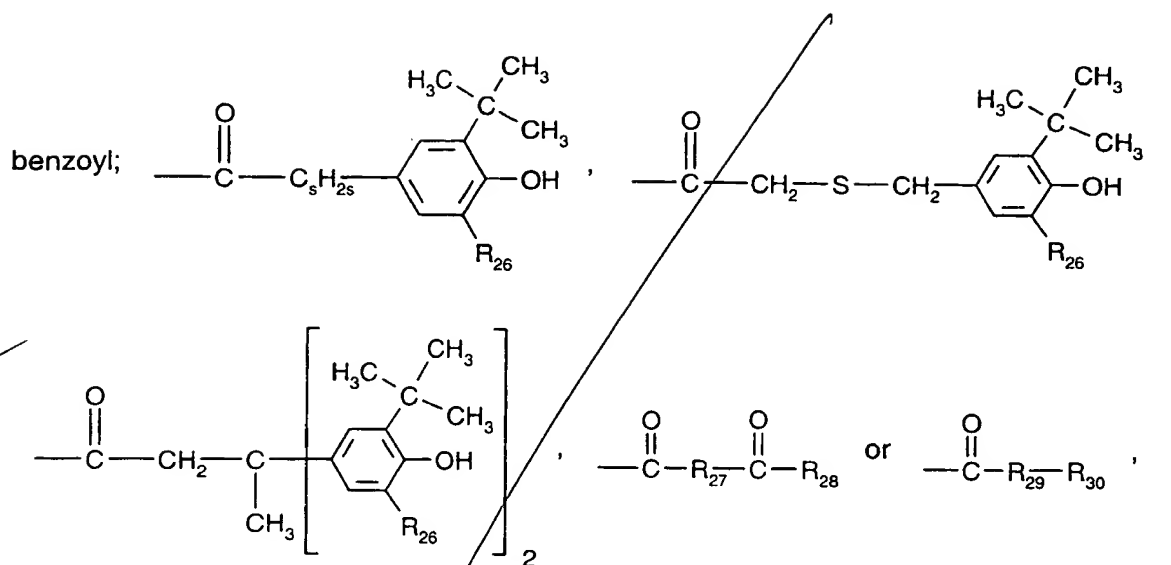
interrupted by oxygen, sulphur or $\text{>N}-R_{14}$ and which is unsubstituted or substituted at

the phenyl moiety by 1 to 3 C_1 - C_4 alkyl, or R_{20} and R_{21} , together with the linking carbon atoms, form a C_5 - C_{12} cycloalkylene ring which is unsubstituted or substituted by 1 to 3 C_1 - C_4 alkyl;

R_{22} is hydrogen or C_1 - C_4 alkyl,

R_{23} is hydrogen, C_1 - C_{25} alkanoyl, C_3 - C_{25} alkenoyl; C_3 - C_{25} alkanoyl which is interrupted by

oxygen, sulphur or $\text{>N}-R_{14}$; C_2 - C_{25} alkanoyl which is substituted by a $\text{di}(C_1$ - C_6 alkyl)phosphonate group; C_6 - C_9 cycloalkylcarbonyl, thenoyl, furoyl, benzoyl or C_1 - C_{12} alkyl-substituted



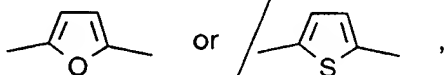
R_{24} and R_{25} are each independently of the other hydrogen or C_1 - C_{18} alkyl,

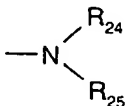
R_{26} is hydrogen or C_1 - C_8 alkyl,

R_{27} is a direct bond, C_1 - C_{18} alkylene; C_2 - C_{18} alkylene which is interrupted by oxygen, sulphur

or —N—R_{14} ; C_2 - C_{18} alkenylene, C_2 - C_{20} alkylidene, C_7 - C_{20} phenylalkylidene, C_5 - C_8 cycloalky-

lene, C_7 - C_8 bicycloalkylene, unsubstituted or C_1 - C_4 alkyl-substituted phenylene,



R_{28} is hydroxy, $\left[\text{—O}^- \frac{1}{r} \text{M}^{r+} \right]$, C_1 - C_{18} alkoxy or —N—  ,

R_{29} is oxygen or —NH— ,

R_{30} is C_1 - C_{18} alkyl or phenyl,

R_{31} is hydrogen or C_1 - C_{18} alkyl,

M is an r-valent metal cation,

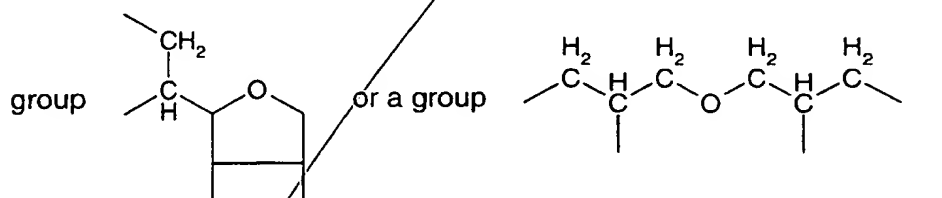
Q is oxygen or —NH— ,

X is a direct bond, oxygen, sulphur or $\text{—NR}_{31}\text{—}$,

Z is a linking group of valency (k+1) and is as a divalent group C_2 - C_{12} alkylene, Q-interrupted C_4 - C_{12} alkylene, phenylene or phenylene-D-phenylene with D being C_1 - C_4 alkylene, O, S, SO or SO_2 ;

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Z as a trivalent group is C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, a group (-CH₂)₃C-CH₂OH, or a group -C_aH_{2a}-N(C_bH_{2b})-C_cH_{2c}-; and
 Z as a tetravalent group is a tetravalent residue of a hexose or a hexitol, C₄-C₁₂alkanetetryl, a



a, b, c and k independently are 1, 2 or 3,

m is 0 or a number from the range 1-12, preferably 1-6,

n is 1 or 2,

q is 1, 2, 3, 4, 5 or 6,

r is 1, 2 or 3, and

s is 0, 1 or 2;

provided that, when R₇ is hydroxy, alkanoyloxy or alkanoyloxy interrupted by O, S or N(R₁₄) and R₉ is hydrogen, R₁₀ is not identical with R₄.

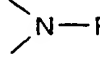
4. Process according to claim 1, wherein in the compound of formula I

R₂, R₃ and R₅, independently, are H, Cl, hydroxy, C₁-C₂₅alkyl, C₇-C₉phenylalkyl, unsubstituted or C₁-C₄alkyl-substituted phenyl; C₁-C₁₈alkoxy, C₁-C₂₅alkanoyloxy, C₃-C₂₅alkenoyloxy; and where

R₄ is Cl, hydroxy, C₁-C₂₅alkyl, C₇-C₉phenylalkyl, unsubstituted or C₁-C₄alkyl-substituted phenyl; C₁-C₁₈alkoxy, C₁-C₂₅alkanoyloxy, C₃-C₂₅alkenoyloxy or is a group -C_mH_{2m}-COR₁₅, -O-(C_vH_{2v})-COR₁₅, -O-(CH₂)_q-OR₃₂, -OCH₂-CH(OH)-CH₂-R₁₅, -OCH₂-CH(OH)-CH₂-OR₃₂, or where R₃, R₅ and R₆ are H, R₄ may be a residue of formula III, or where R₈ or R₁₀ are other than H, R₄ may also be hydrogen;

R₆ is H,

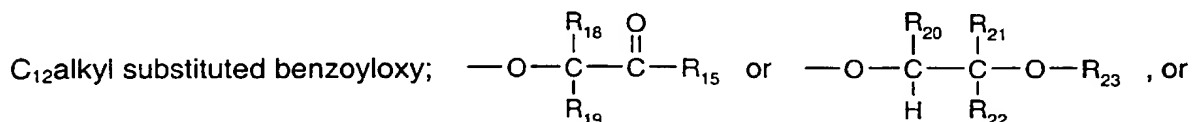
R₇ and R₉ are each independently of one another hydrogen; halogen; C₁-C₂₅alkyl; C₂-C₂₅alkyl

which is interrupted by oxygen, sulphur or  ; C₃-C₂₅-alkenyl; C₃-C₂₅alkynyl; C₇-

C₉phenylalkyl; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl;

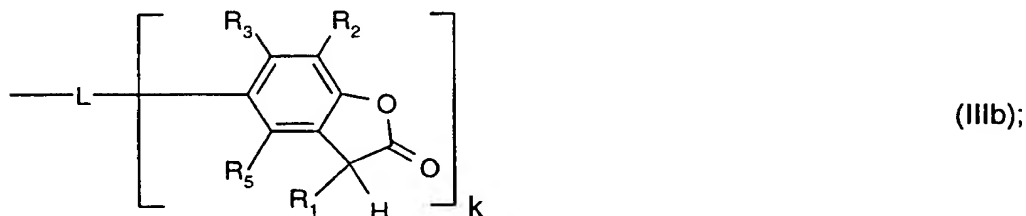
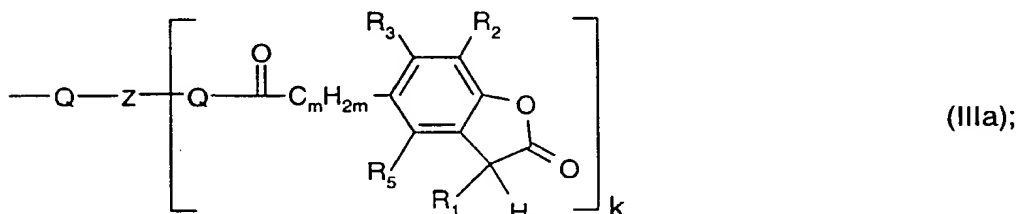
R₈, R₁₀ and R₁₁, independently are H, halogen, hydroxy, C₁-C₂₅alkyl, O interrupted C₂-C₂₅alkyl; C₁-C₂₅alkoxy, O interrupted C₂-C₂₅alkoxy, C₃-C₂₅alkenyl, C₃-C₂₅alkenoyloxy, C₇-

C₉phenylalkyl, C₇-C₉phenylalkoxy, unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl substituted phenoxy; unsubstituted or C₁-C₄alkyl substituted C₅-C₈cycloalkyl; unsubstituted or C₁-C₄alkyl substituted C₅-C₈cycloalkoxy; C₁-C₄alkylamino, di-(C₁-C₄-alkyl)amino, C₁-C₂₅alkanoyl; C₁-C₂₅alkanoyloxy; C₆-C₉cycloalkylcarbonyl, C₆-C₉cycloalkylcarbonyloxy, benzoyl or C₁-C₁₂alkyl-substituted benzoyl; benzoyloxy or C₁-



where in formula II R₇ and R₈ or R₈ and R₁₁ together with the carbon atoms, they are bonded to, form a phenyl ring;

R₁₅ and R'₁₅ independently are C₁-C₁₈alkoxy; C₃-C₂₀alkoxy interrupted by O and/or substituted by a radical selected from OH, phenoxy, C₇-C₁₅alkylphenoxy, C₇-C₁₅alkoxyphenoxy; or are C₅-C₁₂cycloalkoxy; C₇-C₁₇phenylalkoxy; phenoxy; or -NR₂₃R₂₄; or a group of formula IIIa or IIIb;



R₁₆ and R₁₇ independently are H, CF₃, C₁-C₁₂alkyl or phenyl; or R₁₆ and R₁₇ together with the bonding carbon atom form an unsubstituted or 1-3 C₁-C₄alkyl-substituted C₅-C₈cycloalkylidene ring;

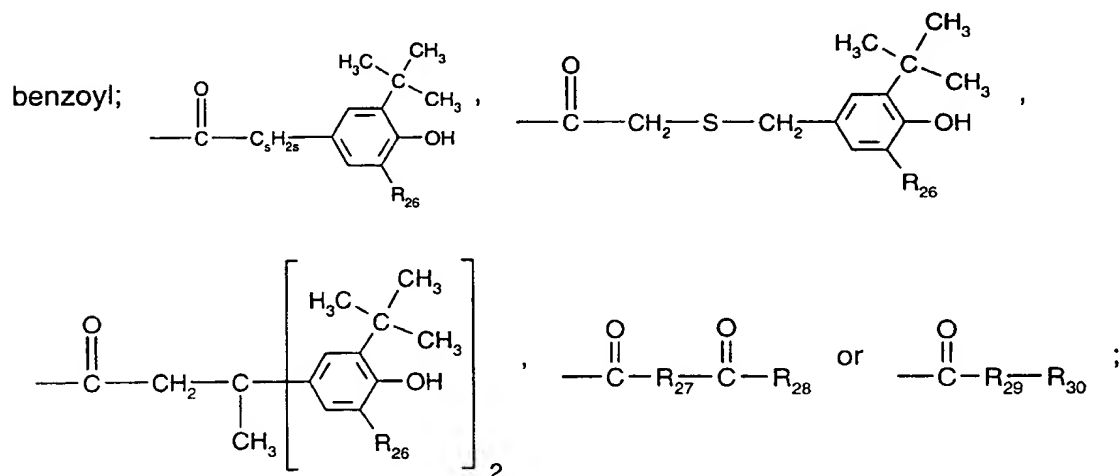
R₁₈ and R₁₉ independently are H, C₁-C₄alkyl or phenyl;

R₂₀ is H or C₁-C₄alkyl;

R₂₁ is H, unsubstituted or C₁-C₄alkyl substituted phenyl; C₁-C₂₅alkyl, unsubstituted or on the phenyl ring 1-3 C₁-C₄alkyl-substituted C₇-C₉phenylalkyl;

R₂₂ is H or C₁-C₄alkyl;

R₂₃ is H, C₁-C₂₅alkanoyl, C₃-C₂₅alkenoyl; di(C₁-C₆alkyl)phosphonate-substituted C₂-C₂₅alkanoyl; C₆-C₉cycloalkylcarbonyl, thenoyl, furoyl, benzoyl or C₁-C₁₂alkyl-substituted

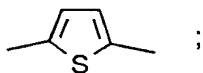


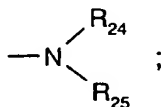
R₂₄ and R₂₅ independently are H or C₁-C₁₈alkyl;

R₂₆ is H or C₁-C₈alkyl;

R₂₇ is a direct bond, C₁-C₁₈alkylen, C₂-C₁₈alkenylen, C₇-C₂₀phenylalkyliden, C₅-

C₈cycloalkylen, unsubstituted or C₁-C₄alkyl-substituted phenylene,  or



R₂₈ C₁-C₁₈alkoxy or  ;

R₂₉ is O or -NH-;

R₃₀ C₁-C₁₈alkyl or phenyl;

M a metal cation of the valency r;

X a direct bond, O, S or $-NR_{31}-$;

n 1 or 2;

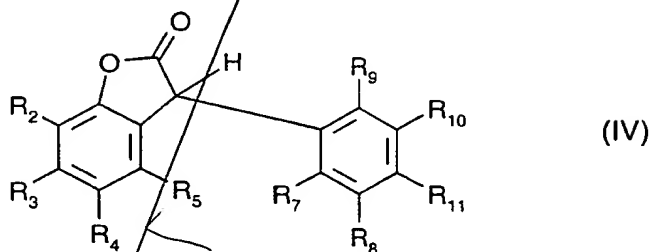
m is a number from the range 1-8;

q 1, 2, 3, 4, 5 or 6;

r 1, 2 or 3; and

s is 0, 1 or 2.

5. Process according to claim 1 wherein the compound of formula I corresponds to the formula IV

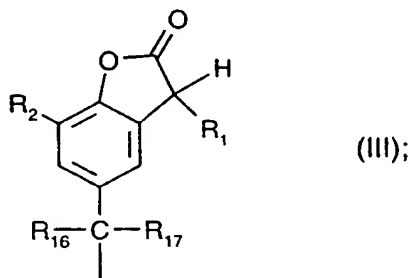


wherein

R_2 is H or C_1-C_{20} alkyl;

R_3 is H or C_1-C_{18} alkyl;

R_4 is C_1-C_8 alkyl, H, C_1-C_6 alkoxy or a group $-C_mH_{2m}-COR_{15}$; $-O-(C_vH_{2v})-COR_{15}$, $-O-(CH_2)_q-OR_{32}$; $-OCH_2-CH(OH)-CH_2-R_{15}$; $-OCH_2-CH(OH)-CH_2-OR_{32}$; or a group of the formula III



R_5 is H or C_1-C_{18} alkyl;

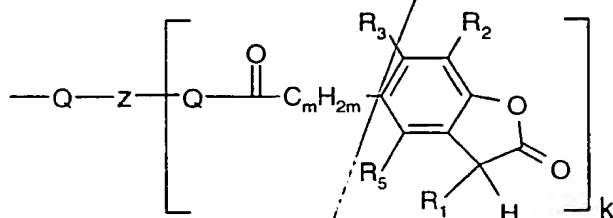
R_7 and R_9 are each independently of one another hydrogen; halogen; C_1-C_{25} alkyl; C_3-C_{25} alkenyl; C_3-C_{25} alkynyl; C_7-C_9 phenylalkyl; unsubstituted or C_1-C_4 alkyl-substituted phenyl; unsubstituted or C_1-C_4 alkyl-substituted C_5-C_8 cycloalkyl;

R₈, R₁₀ and R₁₁ independently are H, OH, chloro, C₁-C₁₈alkyl, C₁-C₁₈alkoxy, di(C₁-C₄alkyl)amino, C₇-C₉phenylalkyl; unsubstituted or C₁-C₄alkyl-substituted phenyl; unsubstituted or C₁-C₄alkyl-substituted C₅-C₈cycloalkyl; C₂-C₁₈alkanoyloxy, C₃-C₁₈-

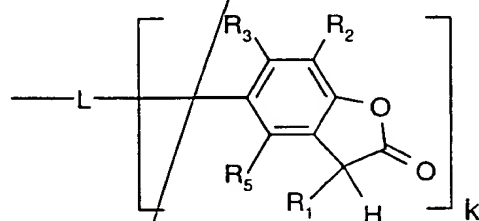
alkoxycarbonylalkoxy or $\text{—O—}\overset{\overset{\text{R}_{20}}{\text{|}}}{\underset{\underset{\text{H}}{\text{|}}}{\text{C}}}\text{—}\overset{\overset{\text{R}_{21}}{\text{|}}}{\underset{\underset{\text{R}_{22}}{\text{|}}}{\text{C}}}\text{—O—R}_{23}$;

especially wherein at least 2 of the residues R₇, R₈, R₉, R₁₀, R₁₁ are H;

R₁₅ is C₁-C₁₈alkoxy; C₃-C₂₀alkoxy interrupted by O; or are cyclohexyloxy; C₇-C₁₇phenylalkoxy; phenoxy; or a group of formula IIIa or IIIb;



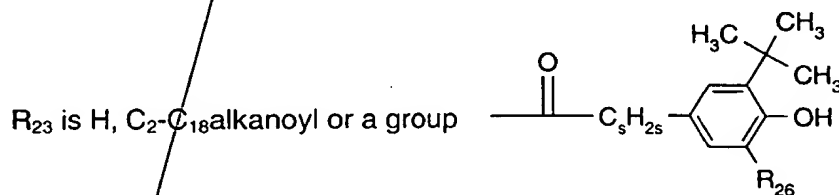
(IIIa);



(IIIb);

R₁₆ and R₁₇ independently are H, C₁-C₁₂alkyl or phenyl; or R₁₆ and R₁₇ together with the bonding carbon atom form a C₅-C₈cycloalkylidene ring;

R₂₀, R₂₁ and R₂₂ independently are H or C₁-C₄alkyl;



R₂₆ is C₁-C₄alkyl;

R₃₂ is C₁-C₁₈alkanoyl; C₁-C₈alkanoyl substituted by phenyl or C₇-C₁₅alkylphenyl; C₃-C₁₈alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a divalent group —O—; Q-C₂-C₁₂alkylene-Q; —O-CH₂-CH(OH)-CH₂-O—;

—Q-C₂-C₁₂alkylene-Q-CO-C_vH_{2v}-O—; —O-C₂-C₁₂alkylene-O-CH₂-CH(OH)-CH₂-O—;

Q is oxygen;

Z is C₂-C₁₂alkylene;

k is 1;

m is 1, 2, 3, 4, 5 or 6;

v is 1 or 2; and

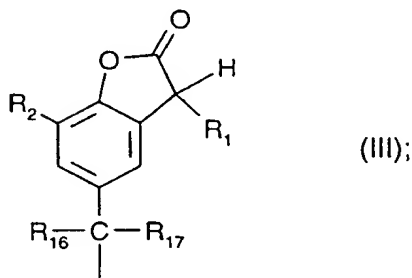
s is 0, 1 or 2.

6. Process according to claim 5 wherein in the compound of formula IV

R₂ is C₁-C₂₀alkyl;

R₃ is H or C₁-C₁₈alkyl;

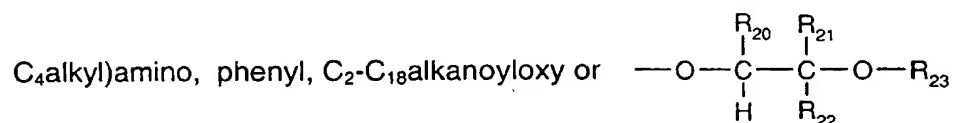
R₄ is C₁-C₆alkyl, C₁-C₆alkoxy or a group -C_mH_{2m}-COR₁₅ or a group of the formula III



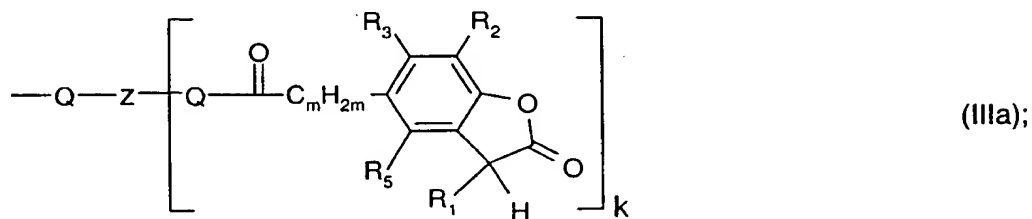
R₅ is H or C₁-C₁₈alkyl;

R₇ and R₉ independently are H, chloro, C₁-C₁₈alkyl;

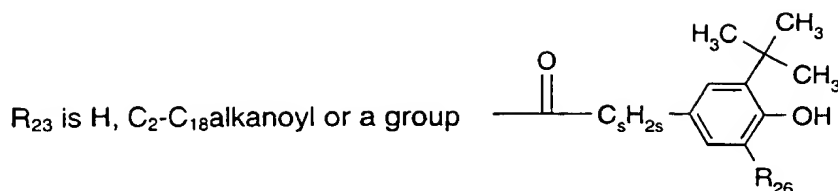
R₈, R₁₀ and R₁₁ independently are H, OH, chloro, C₁-C₁₈alkyl, C₁-C₁₈alkoxy, di(C₁-



R₁₅ is C₁-C₁₈alkoxy or a group of the formula IIIa



R₂₀, R₂₁ and R₂₂ are H;



R₂₆ is C₁-C₄alkyl;

Q is oxygen;

Z is C₂-C₁₂alkylene;

k is 1;

m is 1, 2, 3, 4, 5 or 6 and

s is 0, 1 or 2.

7. Process according to claim 5 wherein in the compound of formula IV, R₄ is C₁-C₆alkyl, or a group -C_mH_{2m}-COR₁₅, -O-(C_vH_{2v})-COR₁₅, -O-(CH₂)_q-OR₃₂, -OCH₂-CH(OH)-CH₂-R₁₅, -OCH₂-CH(OH)-CH₂-OR₃₂, or a group of the formula III.

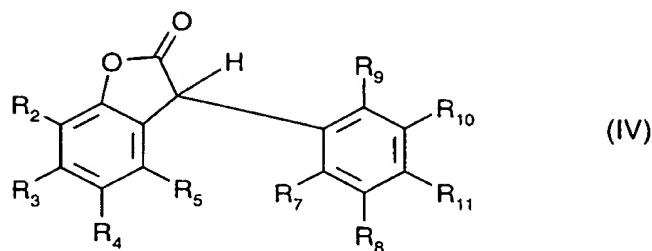
8. Process according to claim 1, wherein the compound of formula I is incorporated into the colour photographic material in an amount from 10 to 1000 mg/m².

9. Process according to claim 1, wherein the compound of formula I is concentrated in one or more interlayers separating light sensitive layers of the colour photographic material.

10. Process according to claim 9, wherein a green-sensitive layer containing a magenta coupler of the pyrazolo-azole class is adjacent to an interlayer containing the compound of formula I.

11. Use of a compound of the formula I according to claim 1 as a scavenger for the oxidised developer in a colour photographic material.

12. A colour photographic material or digital recording material containing a compound of the formula IV



wherein

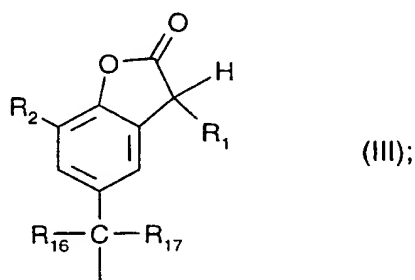
R₂ is H or C₁-C₂₀alkyl;

R₃ is H or C₁-C₁₈alkyl;

R₄ is C₁-C₈alkyl, C₁-C₆alkoxy or a group -C_mH_{2m}-COR₁₅; -O-(C_vH_{2v})-COR₁₅;

-O-(CH₂)_q-OR₃₂; -OCH₂-CH(OH)-CH₂-R₁₅; -OCH₂-CH(OH)-CH₂-OR₃₂;

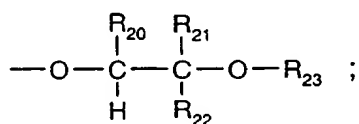
or a group of the formula III



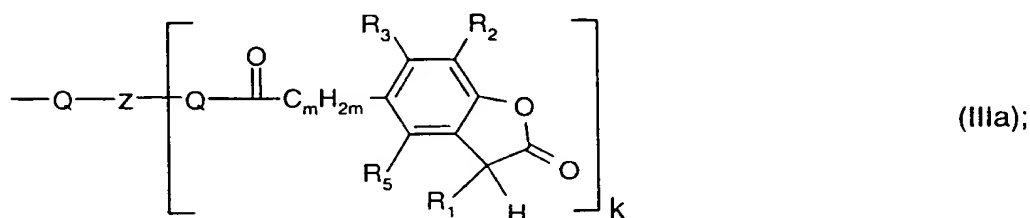
R₅ is H or C₁-C₁₈alkyl;

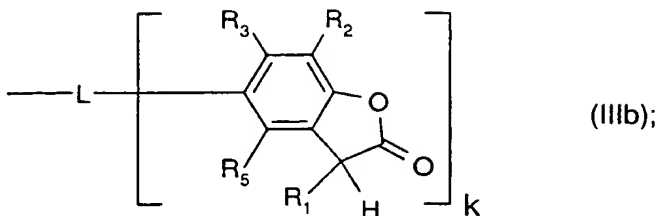
R₇ and R₉ independently are H, chloro, C₁-C₁₈alkyl or phenyl;

R₈, R₁₀ and R₁₁ independently are H, OH, chloro, C₁-C₁₈alkyl, C₁-C₁₈alkoxy, di(C₁-C₄alkyl)amino, phenyl, C₂-C₁₈alkanoyloxy, C₃-C₁₈-alkoxycarbonylalkoxy or



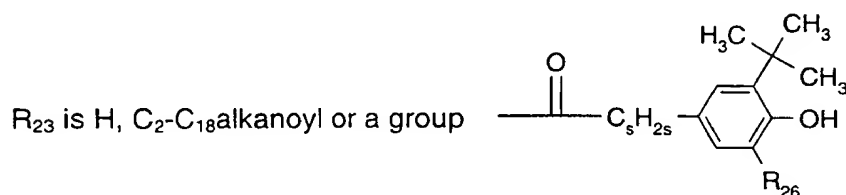
R₁₅ is C₁-C₁₈alkoxy; C₃-C₂₀alkoxy interrupted by O; or are cyclohexyloxy; C₇-C₁₇phenylalkoxy; phenoxy; or a group of formula IIIa or IIIb;





R₁₆ and R₁₇ independently are H, C₁-C₁₂alkyl or phenyl; or R₁₆ and R₁₇ together with the bonding carbon atom form a C₅-C₈cycloalkylidene ring;

R₂₀, R₂₁ and R₂₂ independently are H or C₁-C₄alkyl;



R₂₆ is C₁-C₄alkyl;

R₃₂ is C₁-C₁₈alkanoyl; C₁-C₈alkanoyl substituted by phenyl or C₇-C₁₅alkylphenyl; C₃-C₁₈alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a divalent group -O-; Q-C₂-C₁₂alkylene-Q; -O-CH₂-CH(OH)-CH₂-O-;

-Q-C₂-C₁₂alkylene-Q-CO-C_vH_{2v}-O-; -O-C₂-C₁₂alkylene-O-CH₂-CH(OH)-CH₂-O-;

Q is oxygen;

Z is C₂-C₁₂alkylene;

k is 1;

m is 1, 2, 3, 4, 5 or 6;

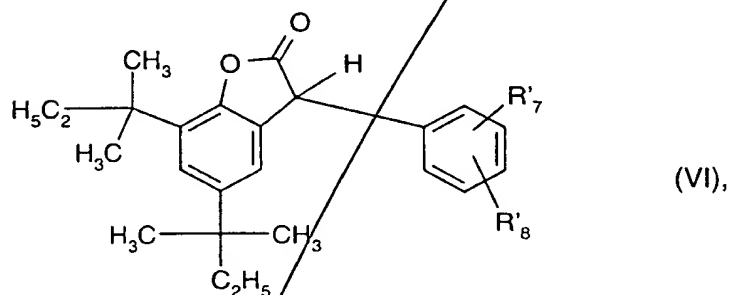
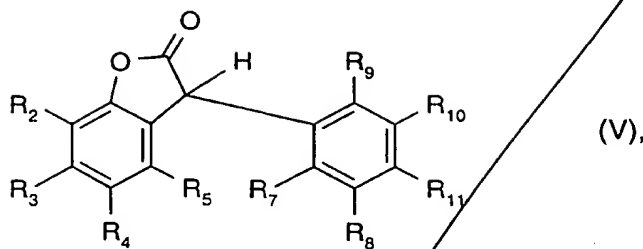
v is 1 or 2 and

s is 0, 1 or 2.

13. Use of a compound of the formula IV according to claim 12 as an additive in a colour photographic material or digital recording material.

14. Compound of the formula V or VI

Sub 24



wherein

R_4 is $-(CH_2)_5-COR'_{15}$ or $-CH(CH_3)-COR_{15}$ or $-C_{12}H_{21}-COR_{15}$, wherein $C_{12}H_{21}$ is a straight chain or branched alkylene moiety; or R_4 is $-O-(C_vH_{2v})-COR_{15}$; $-O-(CH_2)_q-OR_{32}$; $-OCH_2-CH(OH)-CH_2-R_{15}$; or $-OCH_2-CH(OH)-CH_2-OR_{32}$;

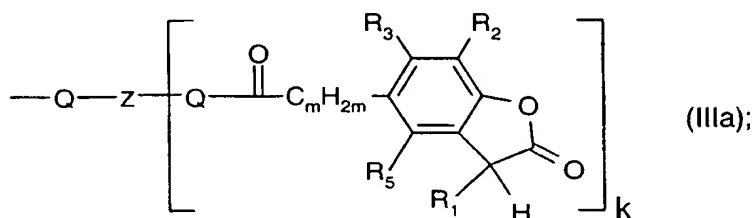
R'_7 is C_1-C_4 alkyl and R'_8 is hydrogen or C_1-C_4 alkyl;

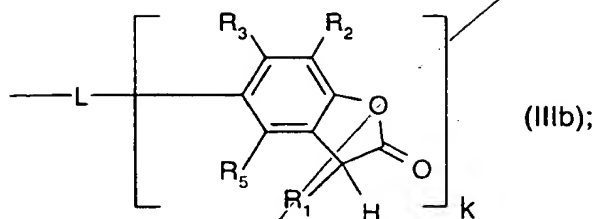
R_{15} is hydroxy, $\left[-O^- \frac{1}{r} M^{r+} \right]$, C_1-C_{20} alkoxy; C_3-C_{20} alkoxy interrupted by O and/or

substituted by a radical selected from OH, phenoxy, C_7-C_{15} alkylphenoxy, C_7-

C_{15} alkoxyphenoxy; or R_{15} is C_5-C_{12} cycloalkoxy; C_7-C_{17} phenylalkoxy; phenoxy; $-N \begin{matrix} R_{24} \\ R_{25} \end{matrix}$;

or a group of formula IIIa or IIIb;





alt R'₁₅ is C₃-C₂₀alkoxy interrupted by O and/or substituted by a radical selected from OH, phenoxy, C₇-C₁₅alkylphenoxy, C₇-C₁₅alkoxyphenoxy; or R'₁₅ is C₅-C₁₂cycloalkoxy; C₇-C₁₇phenylalkoxy; phenoxy; or a group of formula IIIa or IIIb;

R₃₂ is C₁-C₁₈alkanoyl; C₁-C₈alkanoyl substituted by phenyl or C₇-C₁₅alkylphenyl; C₃-C₁₈alkenoyl; cyclohexylcarbonyl; or naphthylcarbonyl;

L is a linking group of valency (k+1) and is, as a divalent group,

-O-;

Q-C₂-C₁₂alkylene-Q;

-O-CH₂-CH(OH)-CH₂-O-;

-Q-C₂-C₁₂alkylene-Q-CO-C_vH_{2v}-O-;

-O-C₂-C₁₂alkylene-O-CH₂-CH(OH)-CH₂-O-;

Q-interrupted Q-C₄-C₁₂alkylene-Q;

Q-phenylene-Q or

Q-phenylene-D-phenylene-Q with D being C₁-C₄alkylene, O, S, SO or SO₂;

L, as a trivalent group, is Q-capped C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, or a group (-O-CH₂)₃C-CH₂OH; -Q-C_aH_{2a}-N(C_bH_{2b}-Q)-C_cH_{2c}-Q-;

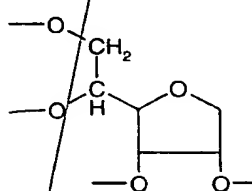
-Q-C₃-C₁₂alkanetriyl(-Q-CO-C_vH_{2v}-O-)₂;

-O-C₃-C₁₂alkanetriyl(-O-CH₂-CH(OH)-CH₂-O-)₂; and

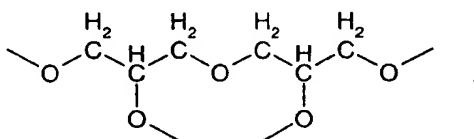
L, as a tetravalent group, is a tetravalent residue of a hexose or a hexitol;

-Q-C₄-C₁₂alkanetetryl(-Q-CO-C_vH_{2v}-O-)₃;

-O-C₄-C₁₂alkanetetryl(-O-CH₂-CH(OH)-CH₂-O-)₃; Q-capped C₄-C₁₂alkanetetryl; a group



or a group

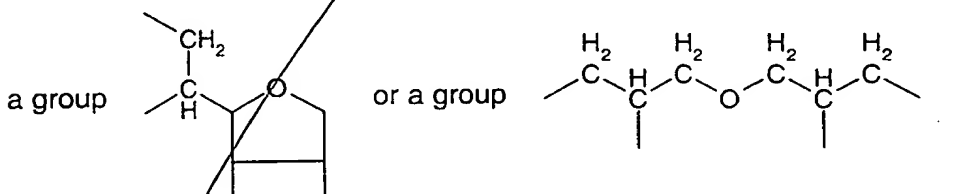


Q is oxygen or -NH-,

Z is a linking group of valency (k+1) and is as a divalent group C₂-C₁₂alkylene, Q-interrupted C₄-C₁₂alkylene, phenylene or phenylene-D-phenylene with D being C₁-C₄alkylene, O, S, SO or SO₂;

Z, as a trivalent group, is C₃-C₁₂alkanetriyl, a trivalent residue of a hexose or a hexitol, a group (-CH₂)₃C-CH₂OH, or a group -C_aH_{2a}-N(C_bH_{2b})-C_cH_{2c}-; and

Z, as a tetravalent group, is a tetravalent residue of a hexose or a hexitol, C₄-C₁₂alkanetetril,



a, b, c and k independently are 1, 2 or 3,

m is 0 or a number from the range 1-12,

s is 1 or 2,

and t is a number from the range 3-12,

v is 1, 2, 3, 4, 5, 6, 7 or 8;

and all other residues are as defined in claim 1 for formula I if n is 1.

15. Process for stabilizing an organic material against deterioration by light, oxygen and/or heat, which process comprises incorporating a compound of the formula V and/or VI according to claim 14 as stabilizer into said organic material.

16. Use of a compound of the formula V and/or VI according to claim 14 as stabilizer for organic material against deterioration by light, oxygen and/or heat.